



CHARTER of the  
LARGE SCALE NETWORKING INTERAGENCY WORKING GROUP

SUBCOMMITTEE ON NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND  
DEVELOPMENT  
COMMITTEE ON TECHNOLOGY  
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

**A. Official Designation**

The Large Scale Networking (LSN) Interagency Working Group (IWG) is hereby established by action of the Subcommittee on Networking and Information Technology Research and Development (NITRD) of the National Science and Technology Council (NSTC) Committee on Technology (CoT)<sup>1</sup>.

**B. Purpose**

The purpose of the LSN IWG is to coordinate Federal agency networking R&D in leading-edge networking technologies, services, and enhanced performance. This includes coordination among U.S. national research and education networks and programs in fundamental networking research and architectures, future Internet architectures, wireless networks, software defined networks, software defined infrastructure, network function virtualization, heterogeneous multimedia networks, testbeds, and end-to-end performance and performance measurement. Program coordination also spans network security, privacy, and identity management; dynamic inter-domain networking; public service networks; the science and engineering of complex networks; network infrastructures for advanced discovery environments; network-enabling technology; networking education, training, and outreach; and cyberinfrastructure for scientific and applications R&D. The results of this coordinated R&D, once deployed, assure that next-generation Internets will be scalable, reliable, and flexible. The LSN IWG coordinates closely with the Large-Scale Data Management and Analysis (LSDMA) group and the Cyber Security and Information Assurance group. LSN IWG provides direction to the Joint Engineering Team (JET) and the Middleware And Grid Interagency Coordination (MAGIC) Team.

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<sup>1</sup> The NSTC/CoT/NITRD was originally chartered on December 10, 1991. The most recent charter was signed July 10, 2013.

### **C. Objectives**

- Promote interagency cooperation on secure, robust, end-to-end connectivity and performance (national and international infrastructure) for research networking and science collaboration.
- By coordinating across agencies, accelerate the development and deployment across the Federal government, research community and the private sector of new networking capabilities supporting emerging abstractions such as SDN, virtual environments, and cloud computing.
- Promote trust and cooperation in identity management and privacy through Federal government collaboration with the research and private sectors and through workshops to promote standards and best practices.

### **D. Functions**

The LSN IWG shall perform the following functions:

- Across-agency coordination:
  - Coordinate and collaborate across Federal agencies, other NITRD bodies, and other NSTC committees as appropriate on issues of mutual interest including networking infrastructure supporting research programs and international collaboration, networking testbeds, identity management, and network security.
  - Develop and maintain strong and forward-looking agendas that represent the current and future evolution of Information Technology Research and Development (IT R&D) including software defined networking, networking for cloud computing, broadband wireless access and 5 G technology.
  - Identify interagency and cross-cut opportunities for collaboration, coordination, and leveraging among agencies in specific areas in IT R&D including workshops in software defined networking and broadband wireless and 5G technology.
  - Provide a forum for agencies to exchange program-level information about agency activities (Annual Planning Meeting or Data Call).
  - Select and maintain collegial leadership and dynamic membership.
- Work with the NITRD Program:
  - Develop, maintain, and periodically update interagency short-, mid-, and/or long-range strategic plans and priorities.
  - Participate and support NITRD outreach (workshops, conferences, and other meetings) to support the IWG's agenda.
  - Prepare and maintain an active charter with a specific purpose and objectives.
  - Provide inputs to NITRD's annual Supplement to the President's Budget<sup>2</sup>.

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<sup>2</sup> The IWG's activities will be reported to the appropriate Program Component Areas (s) (PCAs).

- Provide inputs to NITRD’s annual Activities Report summarizing the IWG’s activities.
- Schedule and participate in regularly scheduled and ad hoc meetings, and maintain documentation of the meeting discussions.
- Work with other stakeholders:
  - Assist and support the NITRD Subcommittee in responding to the recommendations of the President’s Council of Advisors on Science and Technology (PCAST), and responding to inquiries from NSTC, Office of Science and Technology Policy (OSTP), Office of Management and Budget (OMB), and Congress.
  - Provide inputs to NSTC strategic and Federal Plans when requested.

## **E. Membership**

The following NITRD Member agencies are represented on the LSN IWG<sup>3</sup>:

- Department of Commerce;
- Department of Defense;
- Department of Energy;
- Department of Health and Human Services;
- Department of Homeland Security;
- Environmental Protection Agency; and
- National Science Foundation.

The following components of the Executive Office of the President may also be represented on the LSN IWG:

- Office of Management and Budget; and
- Office of Science and Technology Policy.

Federal departments, agencies, and councils that participate in the LSN IWG’s activities include:

- Department of Transportation;
- Federal Communications Commission; and

such other Executive organizations, departments, and agencies as the NITRD Subcommittee or IWG Co-chairs may designate as appropriate.

## **F. Leadership**

The Co-chairs of the LSN IWG shall be named and approved by the NITRD Subcommittee Co-chairs.

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<sup>3</sup> Changes to membership may occur without requiring a charter amendment. After charter ratification, membership and changes to membership may be tracked in a separate document.

## **G. Private-Sector Interface**

The LSN IWG may work with appropriate private-sector<sup>4</sup> entities, including the President's Council of Advisors on Science and Technology (PCAST), and will recommend to the Subcommittee on Networking and Information Technology R&D the nature of any additional private-sector advice needed to accomplish its mission. The LSN IWG may interact with and receive *ad hoc* advice from various private-sector groups, consistent with the Federal Advisory Committee Act.

## **H. Resources**

The NITRD NCO shall provide project management, technical, information technology/networking, and administrative support services to the LSN IWG as part of its responsibilities to the NITRD Subcommittee.

## **I. Termination**

Unless renewed by the Co-chairs of the NITRD Subcommittee prior to its expiration, the LSN IWG shall terminate no later than December 30, 2017.

## **J. Determination**

I hereby determine that the establishment of the Large Scale Networking Interagency Working Group is in the public interest in connection with the performance of duties imposed by the Executive Branch by law, and that such duties can be performed through the advice and counsel of such a group.

Approved:

Keith A. Marzullo, Ph.D.     3/1/16  
Co-chair  
Subcommittee, Networking and Information  
Technology R&D

James Kurose, Ph.D.     3/2/16  
Co-chair  
Subcommittee, Networking and Information  
Technology R&D

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<sup>4</sup> The Federal Advisory Committee Act, 5 U.S.C. App., as amended, does not explicitly define "private sector", but the phrase is generally understood to include individuals or entities outside the Federal government such as, but not limited to, the following: non-Federal sources, academia, State, local or tribal governments, individual citizens, the public, non-governmental organizations, industry associations, and international bodies.